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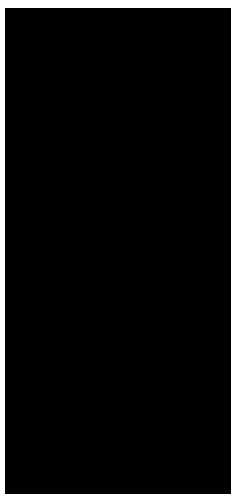
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HOW PRINTS ARE MADE



HOW PRINTS ARE MADE

SECOND EDITION
(REVISED)

BY
ATHERTON CURTIS

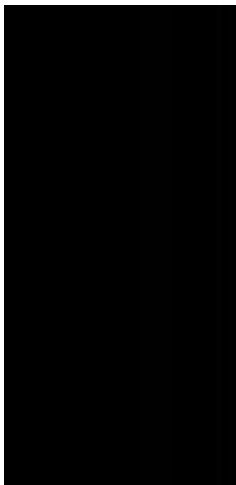


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INTRODUCTORY NOTE

THE descriptions of the various processes which follow are not intended for technical treatises. They give the most important facts for those who know little of how prints are made, but they do not enter sufficiently into details to be of use to the professional worker.



HOW PRINTS ARE MADE

I

BURIN ENGRAVING

ENGRAVING is done generally upon a thin, flat copperplate. The instrument used is a small, pointed chisel, which gives a V-shaped cut. It is known as a burin or a graver. The strength of the line is varied by the size of the burin, and by the depth of the cut. The engraver works by pushing the burin, holding it almost flat against the plate.

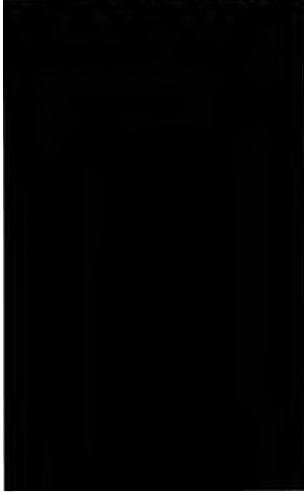
This is the process employed by Dürer and the early masters. It is often known as *line engraving*, but this term is not strictly correct, since any engraving process that works in line has as good a right to the title. It is also known simply as *engraving*, in distinction to *etching*, and is popularly called *steel-engraving*, though steel plates are rarely used, except in commercial work, copperplates having always been the *medium for artistic engraving*.



II

ETCHING

RE is generally used, though it is also used on zinc, iron and other metals. The plate is heated, and a ball of etching wax, composed chiefly of wax, is melted. This is made smooth by means of a cloth or a *dabber* because it is dangerous to touch the plate. When the etching wax is cold it forms an extremely thin layer on the surface of the plate. The plate is then smoked by holding the plate



t in below the surface of the plate, and
per and wider this line, the heavier and
it will print. This operation with the
known technically as *biting the plate*. If
st wishes to bite some lines deeper than
he takes the plate from the acid and covers
es that have been bitten deeply enough
a liquid varnish known as *stopping-out*
t. This is applied with a brush. When
es are thus stopped out, the plate is re-
in the acid and the biting continues in the
ed lines. When all the lines have been
to the required depth, the plate is taken
he acid, the etching-ground is removed,
e plate is ready for the printing.

III

AQUATINT

practically etching. The ground is of a
nature, which leaves minute interstices
in which the acid may penetrate. The
laid on with a brush, as if the artist were
a wash-drawing. When the ground is
ed and the plate printed from, the result
nt which gives the appearance of a draw-
le upon the paper with a brush and ink.


II



IV

SOFT-GROUND ETCHING

indicates, this is done with a soft
of the usual hard etching-ground,
er is placed upon the soft ground
is then made upon the paper with
hen the paper is removed it takes
ay with it wherever the pressure
as been applied. This leaves the
d, and the biting is then done as
hing.




gives the printed line a soft, blurred appearance. If the burr is removed with a scraper, the line that remains differs little from etched line. Dry-point work is often used in conjunction with etching to give finishing touches. It also gives beautiful results when used by itself.

VI

MEZZOTINT

Mezzotint is also done upon a copperplate, but it differs greatly from the previous processes. The plate is first prepared with an instrument known as the *mezzotint rocker*. The rocker has a curved surface with fine teeth. It is rocked back and forth over the plate in every direction, until the surface of the plate is a mass of little dots, each of which has a *burr* raised by the teeth of the rocker. If the plate were printed from in this condition, it would give a uniform black surface on the paper. The artist now takes a scraper and works upon the plate by scraping away the mezzotint ground. Wherever he scrapes, part of the work of the rocker is removed, and this portion of the plate will print lighter. By more or less scraping he may get any tone he




the blackest printer's ink to which
he works from black to white in
white to black, as in the previous

VII

PRINTING FROM COPPERPLATES

raving, etching, aquatint, dry
zzotint, the method of printing
the work on the plate is not raised
cut in below the surface. The
process is as follows: The plate is inked



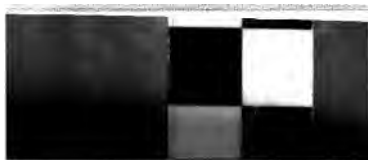
been inked and wiped. The action of the rag draws some of the ink out of the lines, leaving it upon their edges, which, in the print, gives a rich effect somewhat akin to dry-point.

VIII

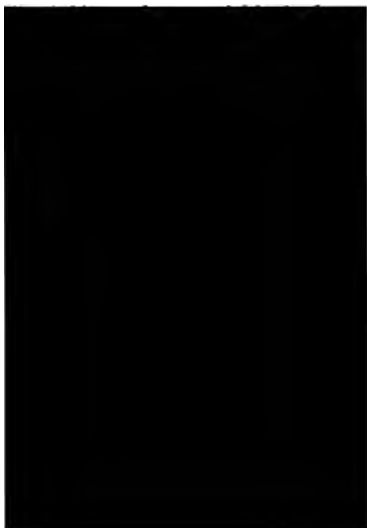
WOOD-ENGRAVING

THIS differs entirely in principle from the processes previously described. In those, the line which holds the ink for the printing is cut into the plate, and it is therefore *below* the surface of the copper. In wood-engraving the engraver cuts away the part of the block that is *not* to be printed from, and the part that holds the ink for the printing is therefore raised *above* the surrounding surface. The wood-block upon which the engraving is done must be hard and close-grained. The instruments are chisel-shaped, or are sharpened to a fine edge. A knife may also be used, and, in fact, any tool that will cut into the surface of the wood.

The nature of wood-engraving gives the engraver the choice of two methods of procedure, or a combination of the two. He may cut away the wood so as to leave narrow lines raised above the surface, resembling, when printed, the lines made



with a pen on the paper. He may, on the other hand, cut lines in the wood-block in such a way that he would cut them in a copy of the lines so cut will not show black in subsequent printing, because they are the surface of the block and cannot, therefore, hold the ink. As the ink is held by the surface on each side of the line, the result in the printed copy is a white line on a black ground. This white line is the true method for the engraver, as it is more in the spirit of the original than the black line, which requires more



tone is covered with acid, in order to fix the drawing, so that it will resist well in the printing; but the acid does not remain long enough upon the stone to eat into its surface. In lithography there is neither a raised nor an incised line. The printing is done from a perfectly flat stone, and the process differs, therefore, entirely from all the engraving or etching processes. In order to print impressions, the stone is moistened with water, and as water and grease do not combine, the parts drawn upon with the greasy crayon repel the water, while the parts not drawn upon absorb it. A roller charged with greasy ink is now passed over the surface, and, for the same reason as before, the ink is repelled by the wet parts and adheres to every part drawn upon. A sheet of damp paper is placed on the stone, which is then passed through the press. The ink becomes transferred to the paper and produces an exact facsimile of the drawing on the stone.

The lithographer may work on the stone with a scraper, for the purpose of taking out parts of his drawing, and he may even do his entire drawing by this method. In this case, he blackens the surface of the stone with a crayon and works from dark to light, as in ordinary *mezzotint*.



ay also work on the stone v
reasy ink. This process g
the effect of a wash-draw
is called *lithotint*.

cially prepared paper may al
n lithography. When the
it is transferred from the pape
printing is then done in the
drawing had been made upo
st place.



In lithography the wearing is different from the wearing in the other processes. The stone itself does not wear, but the drawing upon it becomes used up, the grease which has penetrated the surface becoming gradually exhausted.

XI

COLOUR-PRINTING

WOOD-ENGRAVING and lithography are the processes that have been used most generally for printing in colours. The printing in this case is done from a number of stones or blocks. Each stone or block has on it that part of the drawing which is to be printed in a particular colour, and it is inked with the colour desired. The sheet of paper is run through the press for each print as many times as there are colours, the stone or block being changed each time. Colour-printing from copperplates may also be done in the same way.

Printing in a number of colours may be done from a single plate, but, in this case, the different parts of the plate must be coloured separately, and the printer becomes himself an artist painting upon the plate.

AND INTERPRETATIVE PRINTS

the process by which they may be divided into two broad and interpretative. An imitative print is a copy done from the painting or other work of art, and holds, therefore, the same relation in literature. Such prints were of great value before the invention of photography, and their purpose is now made useful

one person. The artist may, of course, work the plate, block or stone from one of his own paintings or drawings, but this does not take away from the originality of the result, because the painting or drawing is his own, and he merely exercises his right to put his conception in another form, as he would do if he made a water-colour after one of his paintings, or a painting after one of his drawings.

It is important that the relationship of the artist to the print, in the case of original work, be made clear, because even among artists themselves this relationship is often not understood. When a print by Dürer or Rembrandt is shown, the question is sometimes asked: "Where is the original of that?" The answer is that the person is looking at the original. The plate itself is not the original work of art, as has sometimes been said, because it is incomplete. When the artist is working upon the plate, he is thinking continually of the prints that are to be made from it and he does his work always with reference to them. The plate itself is only part of the process and the result aimed at is obtained only when the prints are made. The plate may be destroyed afterwards and still the work of art exists, as it was intended to exist, in each of the prints. The plate is merely one of the

class the artist engraver.


a pen or a fine brush, and the engraver cuts the wood away from between the lines, leaving them to be printed from the artist's work on paper. Now when an artist may make an original drawing on a wood-block, it is evident that the engraver is a new element, coming, as he does, between the artist and the print. And the engraver may so dominate the whole process that it is difficult to refuse the title of original printer. Under the direction of a master engraver, for example, the engraver becomes almost a tool in the artist's hands. He is merely to cut away mechanically the wood that is not wanted, leaving the drawing standing out above the surrounding surface.

European case. The man who makes the design is, of course, the dominating personage in the studio, and it is he who signs the work, and who deservedly gets the credit of it; but we must remember that he has his assistants, though their names in most cases have been lost to us. The prints which result from this combination may be properly described as original, because they are the result aimed at by the artist and his assistants. The drawing made by the artist in the first place is pasted upon the wood-block, and is consequently destroyed in the subsequent processes. Nothing remains but the prints to show the artist's idea.

XIII

TECHNICAL TERMS


THE words *print* and *impression* designate the printed sheet of paper after it has received the impression of the plate, wood-block or lithographic stone. *Proof* has often the same meaning, though it is more customary to confine its use to the early, finer impressions. A *trial-proof* is an impression taken during the course of the work in order that the artist may see the effect of his plate when printed from.



is a reproduction of a print
r than the artist. The word
oneously used in the sense of
7.

7 is applied to prints as to books
whole number of impressions
ne.

change is made in the work on
ck or stone after one or more
e been printed, the impressions
e change are called the *first*
nted after the change, the *second*
e changes are made in the work
n or impressions are printed



made an engraving after Raphael, we mean that he made an engraved copy of one of Raphael's paintings or drawings.

On old prints, and sometimes on modern ones, the following inscriptions occur :

Fecit, or abbreviated to *ft.*, *fec.*, *fe.*, *f.*, meaning *made*. Thus, *Claudius fecit* means *Claude made it*. The imperfect *faciebat* of the same verb is also used in the same way.

Invenit., *inve.*, *inv.*, *in.* meaning *invented*.

Delineavit, *delin.*, *deli.*, or *del.* meaning *drew*.

Sculpsit, *sculps.*, *sculp.*, *sc.*, and also *sculpebat* meaning *engraved*.

Prints upon which these inscriptions are found are not necessarily original, as sometimes the engraver considered himself the important personage and did not mention the name of the artist whose work he interpreted, while at other times he looked upon himself merely as a copyist and did not therefore sign his own name.

Some etchers have signed *fecit aqua forti*, meaning *made it in etching*, which may be taken as proof that the work is original unless accompanied by other inscriptions showing the contrary.

Pinxit, *pinx.*, *pin.*, *p.*, and *pingebat* meaning *painted*.

exc., or *ex.* mean *published*.

trations of the above, if we find
x., *Drevet sc.* on a print, meaning
engraved it, Drevet engraved it, we know
it is not an original; while *C. Vis-*
t sc., meaning, *C. Visscher drew and*
engraved it, would show us at once the work
is by Visscher's own, and consequently
so, too; *Nanteuil pin. et sculp.* shows
Nanteuil made the engraving after one of
his paintings and that it is, therefore, an
original work. We also find on portraits such
as *Nanteuil ad vivum sculpebat* or
del. et sculp., the *ad vivum* meaning

In these cases the work is, of course,
Rem
ords cum privilegio, meaning *with per-* kin
nify that the owner of the picture has
permission to have it engraved

abbreviations *lithog.*, *litho.*, and *lith.*, found on French lithographs in two different, somewhat perplexing to the uninitiated. When the abbreviation follows an artist's name, it signifies that the lithograph is by him, as *Eugène Delacroix lith.*, and *Lith. par Eugène Isabey* has the same signification; but when the word *lith.* is followed by the word *de* and a name, this signifies that the name is that of the printer, as *Lith. de Vercier*. Thus, if we find the inscriptions *Isabey del.—Lith. de C. Motte*, we are to infer that the print is not an original by Isabey. The meaning is that the work was drawn on stone by Isabey and printed at the lithographic establishment of C. Motte.

Remarques are small sketches or scratches found on the margin of the plate or stone outside of the principal composition. It is rare to find them on works by the best masters. In some cases occur, the *remarques* are generally small sketches done half unconsciously by the artist, or scratches by which he has tested his pencil or his crayon. They are generally removed from the plate or stone before the printing of the regular edition and prints on which they are found are therefore as a rule early impressions. But as large numbers of worthless etchings with *remarques* especially

